

**Association of Perceived Self and Public Stigma of Undergraduate Students
on Perceived Financial Help-Seeking Behavior**

Honors Undergraduate Thesis

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University

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Abstract

Despite evidence of undergraduate students feeling stressed about their personal finances, many do not seek help to reduce their stress. This study examines factors that influence the decision to not seek help by examining association between perceived financial help-seeking behavior of Ohio State University undergraduate students and measures of perceived self and public stigma. Participants were asked to complete a 40-question survey; scales validated in previous stigma research were adapted for use in the context of financial help-seeking behavior. Self-stigma was measured using the Self-Stigma of Seeking Help scale and questions from the Attitudes Towards Seeking Professional Help scale. Public stigma was measured using questions from the Perceived Devaluation Discrimination scale. Financial stress was measured using questions from the Study on Collegiate Financial Wellness. Chi-Square analysis and logistic regression were used to analyze the survey results. Our analysis presents statistically significant evidence that the presence of self and public stigma, gender, major, and tracking monthly spending influence a student's unwillingness to seek financial help. Implications exist for university and workplace financial wellness programs, secondary-level and university-level curriculum administrators, and education policy officials in structuring outreach strategies for financial help programs.

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Introduction

Personal finance skills are important for everyone. One must have a basic understanding of how to allocate their income across bills, living expenses, savings, taxes, entertainment, etc. Financial situations grow more complex as people age, have families, and accumulate wealth; evolving tax codes add more complexity often requiring accountants to manage one's assets. A strong foundation is essential to be more prepared to handle future financial challenges. College provides this opportunity to learn when students move off-campus and have to manage expenses such as rent, utilities, and food. Most students are able to find their way and learn the procedure that works best for them. However, for students who can't seem to find a process for managing financial decisions, who are overwhelmed/stressed when thinking about financial decisions, or students that are in financial troubles (credit card debt, emergency expense, living paycheck-to-paycheck, etc.), financial support groups can help these students regain control. Scarlet and Gray Financial is a free service to students at Ohio State that provides financial counseling or students may seek their own financial planners.

This study examines the association between stigma, both self and public, and financial help-seeking behavior. Students may be embarrassed if their friends or family found out they were seeking financial help. Students may also feel internal pressure to 'figure it out' themselves; this is especially relevant for students who are supporting themselves through college. Therefore, students may be unwilling to seek help due to feeling stigmatized and continue to feel stressed over their personal finances.

Literature Review

A majority of university students report feeling stressed about their personal finances (Center for Study of Student Life, The Ohio State University, 2017). Increased stress can lead to negative financial management practices (Hayhoe, Leach, Turner, Bruin, & Lawrence, 2000). Many universities have financial counseling programs available to students but often these programs go underutilized. However, approximately 30% of students report seeing a financial advisor to deal with the stress

of their personal finances (Center for Study of Student Life, The Ohio State University, 2017). It raises a question: If students are feeling stressed about their personal finances and financial counseling is provided free to students, why aren't students taking advantage of these services to reduce their stress?

Existing literature provides evidence for self-stigma and public stigma having an effect on an undergraduate student's attitudes towards help-seeking and willingness to seek help for psychological concerns (Vogel, 2007). No prior research attempts to measure self and public stigma in students regarding personal financial management during college. However, existing studies examine help-seeking behavior in relation to financial wellness. Grable and Joo (1999) presented a framework for explaining financial help-seeking behavior. Using a 5-step process, the authors focused on 'The Decision to Seek Help' by looking at determinants between the 'help-seeking' group and the 'non-help-seeking' group. Lim, Heckman, Letkiewicz, and Montalto (2014) and Heckman, Lim, and Montalto (2014) expanded on Grable and Joo by examining help-seeking behavior of college students and the relationships between financial self-efficacy, financial stress, and financial help-seeking behavior. The authors suggested further research on the mechanisms that trigger a student's decision to seek financial help.

Since there is plenty of research on stigmas in public health research (ex. mental health, HIV, abortion), this study would like to build a survey based on these established measurement scales. The scales used in this study have been used in other studies to examine mental health and HIV stigma. The questions are structured to give users flexibility to adapt the scale to their needs; these scales will be adapted for this study to examine financial help-seeking stigma.

One point of interest is the influence of personal finance instruction on improving financial literacy. Current research has mixed reviews on the effectiveness of these programs (Kaiser & Menkhoff, 2017). State financial literacy requirements are not uniform across state education departments; most require less than 15 hours in personal finance instruction as a graduation requirement, if any instruction is required at all (Center for Financial Literacy, Champlain College, 2017).

Hypothesis

My hypothesis is there is a negative association between a student's willingness to seek financial help and their concern with prejudice (from both themselves and other people) regarding the decision to seek financial help. A student that is unwilling to contact a financial counselor might not be seeking help because they do not wish to be judged poorly by their friends if they found out the student was seeking financial help. A student may also be afraid to acknowledge they have financial struggles; this can be in the form of admitting to a financial counselor or admitting to themselves. On the opposite side, a student willing to seek financial help may not care about other student's judgements because they recognize receiving help is more important than pushing it off to let financial issues grow worse.

Survey Methodology

The data for this study came from a survey administered to Ohio State students. The survey instrument was comprised of 40 questions across seven categories. Each category and their purpose are outlined below. The survey was hosted on Qualtrics and administered to students via student Facebook groups. A copy of the survey is provided in Appendix A. Study bias is minimized by using previously validated survey instruments. Care was taken to change only the necessary words in the original questions so to address stigma related to perceived financial help-seeking behavior and not to compromise the internal validity of the original construct. Reliability analysis was conducted on each scale to determine if interval validity was retained despite the wording changes. The full results of the reliability analysis are given in Appendix C.

Demographics

Questions in this section were used to examine differences by gender, major, and whether a student completed the STEP program. Meeting with a Scarlet & Grey financial counselor is a requirement for STEP students so including this variable for students who have completed STEP, are in the process of completing STEP, and are not in the STEP program will control for prior financial counseling a student may have received. Students were also asked to provide an estimate of how many hours per week

they spend studying, how many hours per week they spend working, and how many hours per night they sleep. These measures were used as a proxy for evaluating how a student manages their time with respect to academics, work responsibilities, and personal care.

Financial Stress

Three questions adapted from The Ohio State University's Study on Collegiate Financial Wellness asked students to evaluate their stress from three different perspectives: personal financial management, paying for school, and paying for monthly expenses.

Attitudes Towards Seeking Professional Help (ATSPH)

Four questions adapted from the shortened form of Fischer & Farina's (1995) Attitudes Towards Seeking Professional Help scale asked students to evaluate their opinion on seeking professional help. Higher scores on this scale indicate more positive attitudes towards seeking professional help. This scale, along with the Perceived Discrimination scale, were used to measure perceived public stigma.

Internalized Stigma of Mental Illness: Social Withdrawal (ISMI)

Four questions adapted from the Social Withdrawal category of Ritsher's (2003) Internalized Stigma of Mental Illness Inventory were used to evaluate how students who display evidence of financial stress react to various social situations. Higher scores on this scale indicate high levels of internalized stigma. These questions were only answered by respondents who answer 'Agree' or 'Strongly Agree' to Question 21 "I struggle to meet financial ends each month." These questions assume that a student is experiencing financial difficulties. Therefore, this scale is only be relevant to students who are struggling with their personal finances.

Perceived Discrimination (PD)

Three questions adapted from Link's (1987) Perceived Devaluation Discrimination Scale were used to analyze public opinion on seeking professional help. Higher scores on this scale indicate increased levels of perceived discrimination. This scale, along with the Attitudes Towards Seeking Help scale, were used to measure perceived public stigma.

Personal Finance Education/Management

Four questions adapted from The Ohio State University's Study on Collegiate Financial Wellness and two questions created for this study evaluated student's personal finance habits. Two questions asked if a student completed personal finance classes in high school and college and, if yes, whether these classes were mandatory or voluntary. One question asked if a student had seen a financial counselor and, if yes, whether this was mandatory or voluntary. The remaining questions gauged how students manage common financial risks; one question asked if a student tracks their monthly spending, one question asked if a student carries renters' insurance, and one question asked if a student would be able to pay for an emergency \$400 expense with their own resources.

Self-Stigma of Seeking Help (SSOSH)

Vogel's (2006) Self-Stigma of Seeking Help scale was adopted to measure the self-stigma a student has with respect to seeking financial help. Higher scores on this scale indicate increased levels of self-stigma. The full ten question scale was adapted for use in the context of seeking financial help.

Data Analysis

Chi-Square analysis was used to examine association between categorical explanatory variables and a student's unwillingness to seek help. Logistic regression was used to model the likelihood a student is unwilling to seek financial help which allows for examination of the association of each independent variable, controlling for all other variables in the model. The dependent variable was an indicator of whether a student was unwilling to see a financial counselor. The responses for the dependent variable, the survey question "I would not seek help from a financial counselor even if I needed it," were recoded from a 5-point Likert scale to a binary scale. Students who responded with 'Strongly Agree,' 'Agree,' or 'Neutral' were coded with a 1 (ie the 'non-help-seeking' group) while students who responded with 'Disagree' or 'Strongly Disagree' were coded with a 0 (ie the 'help-seeking' group). The distribution of responses across the Likert scale was insufficient to allow a multinomial logistic

regression analysis. The neutral responses were grouped with respondents who answered 'Strongly Agree' or 'Agree' since neutrals may be less likely to seek help due to stigmatized feelings. The recoding will allow us to perform a binary Logistic regression.

The independent variables include a variable representing an aggregated score for the three Financial Stress questions, a variable representing an aggregated score for the four questions selected from the Attitudes Towards Seeking Help scale, a variable representing an aggregated score for the three questions selected from the Perceived Discrimination scale, a variable representing an aggregated score for the six Personal Finance Education/Management questions, and a variable representing an aggregated score for the Self-Stigma of Seeking Help scale. For students who answer 'Agree' or 'Strongly Agree' to Question 21, a variable representing an aggregated score for the Social Withdrawal questions adapted from the Internalized Stigma of Mental Illness inventory will be added. Due to low response, there was not enough data to properly evaluate the ISMI variable; this variable is not included in the final analysis.

Additional demographic and categorical independent variables were included in the model as control variables. These include a binary variable for gender with female as the reference category; a binary variable for STEP affiliation where respondents who answered 'No' or 'Yes, currently in STEP' were coded as the reference category; a binary variable for attending personal finance workshops while in high school where no was coded as the reference category and responses 'Yes, mandatory' and 'Yes, voluntarily' were combined; a binary variable for attending personal finance workshops while in university where no was coded as the reference category and responses 'Yes, mandatory' and 'Yes, voluntarily' were combined; a binary variable for tracking monthly spending where no was coded as the reference category; a binary variable for carrying renters insurance where no was coded as the reference category; a variable asking if the respondent could pay for an emergency expense with their own resources where 'No' was coded as the reference category; a set of indicator variables for average number of hours studying per week segmented by 0-4 (reference category), 5-9, 10-14, 15-19, and 20+; and a set of indicator variables for average number of hours working

per week segmented by no job (reference category), part time (1-20 hours), and full time (21+ hours). Demographics and the Chi-Square analysis are given in Table 1:

Table 1: Demographic Characteristics of the Sample

| Variable | Total | Would Not Seek Help n (%) | Would Seek Help n (%) | Chi Square χ^2 (p-value) |
|---|-------|---------------------------|-----------------------|-------------------------------|
| Total | 217 | 61 (28.1) | 156 (71.9) | |
| Gender | | | | 5.758 (0.016) |
| Male | 96 | 35 (16.2) | 61 (28.2) | |
| Female | 120 | 26 (12.0) | 94 (43.5) | |
| STEP Affiliation | | | | 0.676 (0.713) |
| Yes, completed STEP | 46 | 11 (5.1) | 35 (16.2) | |
| Yes, currently in STEP | 18 | 6 (2.8) | 12 (5.6) | |
| No | 153 | 44 (20.4) | 109 (50.5) | |
| Studying/week | | | | 5.743 (0.219) |
| 0-4 | 29 | 12 (5.6) | 17 (7.9) | |
| 5-9 | 49 | 15 (6.9) | 34 (15.7) | |
| 10-14 | 56 | 10 (4.6) | 46 (21.3) | |
| 15-19 | 38 | 12 (5.6) | 27 (12.5) | |
| 20+ | 44 | 12 (5.6) | 32 (14.8) | |
| Working/week | | | | 0.204 (0.903) |
| No job | 69 | 20 (9.3) | 49 (22.7) | |
| Part Time (1-20) | 117 | 32 (14.8) | 86 (39.8) | |
| Full Time (21+) | 29 | 9 (4.2) | 20 (9.3) | |
| Personal Finance Education in High School | | | | 5.164 (0.076) |
| Yes, mandatory | 39 | 16 (7.4) | 23 (10.6) | |
| Yes, voluntarily | 25 | 4 (1.9) | 21 (9.7) | |
| No | 153 | 41 (19.0) | 112 (51.9) | |
| Personal Finance Education in University | | | | 1.347 (0.51) |
| Yes, mandatory | 36 | 9 (4.2) | 27 (12.5) | |
| Yes, voluntarily | 17 | 3 (1.4) | 14 (6.5) | |
| No | 164 | 49 (22.7) | 115 (53.2) | |
| Track Monthly Spending | | | | 13.934 (<0.001) |
| Yes | 108 | 18 (8.3) | 90 (41.7) | |
| No | 109 | 43 (19.9) | 66 (30.6) | |
| Carry Renter's Ins. | | | | 0.186 (0.666) |
| Yes | 76 | 20 (9.3) | 56 (25.9) | |
| No | 141 | 41 (19.0) | 100 (46.3) | |
| Pay \$400 Expense | | | | 3.406 (0.065) |
| Yes | 183 | 47 (21.8) | 136 (63.0) | |
| No | 34 | 14 (6.5) | 20 (9.3) | |
| Seen Financial Counselor | | | | 2.538 (0.111) |
| Yes | 22 | 3 (1.4) | 19 (8.8) | |
| No | 195 | 58 (26.9) | 137 (63.4) | |

Chi-Square Model Results

Gender and tracking monthly spending showed statistically significant association with impacting a student's unwillingness to seek financial help. Females were more likely to seek help compared to males. Respondents who track their monthly spending were more likely to seek help compared to those who do not track their monthly spending.

Logistic Model Results

Four of the nineteen variables in the logistics regression model, the Attitudes Towards Seeking Professional Help scale, the Self-Stigma of Seeking Help scale, the gender indicator, and the business major indicator, showed statistically significant association with a student's unwillingness to seek financial help. More positive attitudes towards help seeking, on average, decreased a student's unwillingness to seek financial help. An increased presence of self-stigma, on average, increased a student's unwillingness to seek financial help. Females were less unwilling to seek financial help compared to males. Business majors were less unwilling to seek financial help compared to non-business majors.

A table with the Logistic regression analysis is given in Table 2:

Table 2: Logistic Regression Results

| | B | S.E. | Exp(B) | Sig. |
|--------------------------|----------|-------------|---------------|-------------|
| Gender (F) | -0.977 | 0.458 | 0.377 | 0.033 |
| Business Student (Y) | -2.059 | 0.757 | 0.128 | 0.007 |
| Completed STEP (Y) | 0.693 | 0.647 | 2.000 | 0.284 |
| Study (5-9) | -0.640 | 0.664 | 0.527 | 0.335 |
| Study (10-14) | -0.872 | 0.692 | 0.418 | 0.208 |
| Study (15-19) | -0.382 | 0.737 | 0.683 | 0.604 |
| Study (20+) | -0.566 | 0.688 | 0.568 | 0.411 |
| Job (Part Time) | 0.192 | 0.468 | 1.212 | 0.681 |
| Job (Full Time) | -0.152 | 0.803 | 0.859 | 0.850 |
| Personal Finance in HS | 0.181 | 0.446 | 1.198 | 0.685 |
| Personal Finance in Uni | -0.078 | 0.534 | 0.925 | 0.883 |
| Track Monthly Spending | -0.646 | 0.445 | 0.524 | 0.147 |
| Carry Renters Ins. | -0.005 | 0.459 | 0.995 | 0.991 |
| Pay \$400 Expense | -0.823 | 0.577 | 0.439 | 0.154 |
| Seen Financial Counselor | -0.919 | 0.858 | 0.399 | 0.284 |
| ATSPH | -0.225 | 0.080 | 0.798 | 0.005 |
| STRESS | 0.052 | 0.063 | 1.054 | 0.409 |
| SSOSH | 0.196 | 0.043 | 1.216 | <0.001 |
| PD | 0.041 | 0.110 | 1.041 | 0.713 |
| Constant | -1.376 | 1.924 | 0.253 | 0.475 |
| -2 Log Likelihood | 160.787 | | | |
| Cox & Snell | 0.346 | | | |
| Nagelkerke | 0.500 | | | |
| % Correctly Predicted | 81.2% | | | |

Limitations

An important limitation in this study is the small sample size. A multinomial logistic regression model could not be used due to insufficient distribution across response categories. The ISMI scale could not be evaluated due to the low number of respondents indicating high levels of financial struggles. Future studies should seek a large sample to gain enough data to draw inference from the ISMI scale and allow for multinomial logistic regression analysis. Multinomial analysis can be used to draw inference between the help-seeking group, the non-help-seeking group, and the neutral group. Future research should seek data outside of one university to obtain more rigorous results but being careful to control for university-specific requirements (ie a university requires students to take a personal finance course).

Intentions towards help-seeking may be a better indicator of actual help-seeking behavior compared to attitudes towards help seeking (Vogel et al., 2007). The SSOSH scale measures both attitudes and intentions (Vogel et al., 2006) but the ATSPH only covers attitudes (Fischer & Farina, 1995). Using measurement scales that cover both attitudes and intentions to seek help may improve the model for predicting the likelihood a student is unwilling to seek financial help.

Implications and Future Research

Results from this research show evidence that stigma may influence a student's decision to not seek financial help. There is also evidence that gender, major, and tracking spending habits are associated with willingness to seek help. While public stigma from a societal standpoint may be difficult to alter, there is the chance to reduce self-stigma within individuals related to seeking help (Vogel et al., 2007). University support programs should structure outreach strategies keeping in mind that students may not seek assistance due to feeling stigmatized. Alternative forms of outreach may include phone/chat counseling, constructing online modules for students to access on-demand personal finance topics, and providing discrete mediums for students to reach out for counseling. University orientation programs could use their platform to message to students about the importance of help-seeking in order to reduce stigma and normalize this behavior. University programs should seek to increase utilization of financial counseling programs by advertising free resources to students. Students who feel they have control over their personal finances may be less likely to experience stress associated with poor financial management (Averill, 1973).

Along with financial pressure, mental health problems are becoming common among university students. Counseling centers have reported an increase in 'severe' psychological problems (Pedrelli, Nyer, Yeung, Zulauf, & Wilens, 2015). The self-stigma associated with mental illness may seem to be similar to the self-stigma associated with seeking psychological help. Tucker et al. (2013) show evidence otherwise in that the stigmatization attributes of the two types differ between each another. This has implications for constructing outreach programs to increase help-seeking behavior in

those who feel stigmatized. Making a distinction from the self-stigma of seeking financial help, or other less 'severe' personal psychological problems in general, versus the self-stigma of mental illness may give fewer negative perceptions if the two constructs are separated. Possible solutions may include separating mental health centers and financial counseling centers on campus, utilizing online financial counseling sign-up and meetings, and removing labels associated with 'mental health' or 'financial counseling' from the offices where students would meet with counselors. Another approach may be to seek financial therapists for students who are suffering from both mental health issues and financial difficulties. Financial therapists may be able to help students in both areas with an integrated plan for both issues whereas a student may have to seek help from two separate sources who do not communicate with each other.

Secondary school administrators may consider enhancing their personal finance curriculums beyond state education requirements. Legislators may consider requiring schools to teach a standalone course in financial literacy. However, current literature has mixed reviews on the effectiveness of personal finance programs due to the difficulty of measuring specific program characteristics (Kaiser & Menkhoff, 2017) and measuring the success of financial literacy education (Hastings, Madrian, & Skimmyhorn, 2013).

Future research may examine student's preferences for seeking financial help. Informal sources such as parents, relatives, and friends may be their first choice over formal counseling services (Tinsley, Aubin, and Brown, 1982). One may ask if these preferences have to do with reputation of the advisor, time convenience, cost, or a mix of these variables. Seeking advice from only family and friends may not be healthy as people may be less likely to make good long-term financial planning decisions (Lusardi & Mitchell, 2006).

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Appendix A – Survey

Q1 Please provide your OSU email address if you wish to be entered for the \$100 Amazon gift card lottery. Emails will be kept confidential and your responses will not be connected to your OSU email address.

Q2 What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other
- ☐ Prefer not to respond

Q3 What college does your major fall under? If you are double majors across two colleges, or you are unsure, please select 'Other' and type in your major(s).

- ☐ College of Architecture
 - ☐ College of Arts and Sciences - Division of Arts and Humanities
 - ☐ College of Arts and Sciences - Division of Natural and Mathematical Sciences
 - ☐ College of Arts and Sciences - Division of Social and Behavioral Sciences
 - ☐ College of Business
 - ☐ College of Dentistry
 - ☐ College of Education and Human Ecology
 - ☐ College of Engineering
 - ☐ College of Environment and Natural Resources
 - ☐ College of Food Agricultural and Environmental Sciences
 - ☐ College of Health and Rehabilitation Sciences
 - ☐ College of Nursing
 - ☐ College of Pharmacy
 - ☐ College of Public Affairs
 - ☐ College of Public Health
 - ☐ College of Social Work
 - ☐ Other - Please type in your major(s)
-

Q4 Did you complete the STEP program?

- ☐ Yes, completed STEP (2)
- ☐ Yes, currently in STEP (1)
- ☐ No (0)

Q5 How many hours do you spend, on average, per week outside of class studying?

- ☐ 0-4
- ☐ 5-9
- ☐ 10-14
- ☐ 15-19
- ☐ 20-24
- ☐ 25-29
- ☐ 30-34
- ☐ 35-39
- ☐ Over 40

Q6 How many hours do you spend, on average, per week working during the academic year (if no job enter 0)?

- ☐ 0 (No job)
- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ Over 40

Q7 How many hours do you spend, on average, per night sleeping during the academic year?

- ☐ 0-1
- ☐ 2-3
- ☐ 4-5
- ☐ 6-7
- ☐ 8-9
- ☐ Over 10

Q8 Did you attend personal finance classes/workshops while in high school?

- ☐ Yes, mandatory (2)
- ☐ Yes, voluntarily (1)
- ☐ No (0)

Q9 Have you attended personal finance classes/workshops while in college/university?

- ☐ Yes, mandatory (2)
- ☐ Yes, voluntarily (1)
- ☐ No (0)

Q10 Do you track your monthly spending?

- ☐ Yes (1)
- ☐ No (0)

Q11 Do you carry renter's insurance?

- ☐ Yes (1)
- ☐ No (0)

Q12 Could you pay for an emergency \$400 expense today without using a credit card or your parents/outside money (ie: only using your money from your checking & savings accounts)?

- ☐ Yes (1)
- ☐ No (0)

Q13 If I believed I was having a financial crisis, my first inclination would be to seek help from a financial counselor.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q14 There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q15 A person should work out his or her own problems; getting financial counseling would be a last resort.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q16 A person with a financial problem is not likely to solve it alone; he or she is likely to solve it with professional help.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q17 I might want to have financial counseling in the future.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q18 I feel stressed about my personal finances in general.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q19 I worry about being able to pay my current monthly expenses.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q20 I worry about having enough money to pay for school.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q21 I struggle to make financial ends meet each month.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q22 I would not seek help from a financial counselor even if I needed it.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q23 Have you seen a financial counselor to discuss your financial situation?

- ☐ Yes (1)
- ☐ No (0)

Q24 I would feel worse about myself if I could not solve my own problems.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q25 I would feel inadequate if I sought help from a financial counselor.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q26 My self-confidence would NOT be threatened if I sought help from a financial counselor.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q27 Seeking financial help would make me feel less intelligent.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q28 My self-esteem would increase if I talked to a financial counselor.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q29 My view of myself would not change just because I made the choice to see a financial counselor.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q30 It would make me feel inferior to ask a financial counselor for help.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q31 I would feel okay about myself if I made the choice to seek help from a financial counselor.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q32 If I went to a financial counselor, I would be less satisfied with myself.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q33 My self-confidence would remain the same if I sought help from a financial counselor for a problem I could not solve.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q34 Most of my friends would treat a person who has admitted they have financial issues just as they would treat anyone.

- ☐ Strongly Disagree (5)
- ☐ Disagree (4)
- ☐ Neutral (3)
- ☐ Agree (2)
- ☐ Strongly Agree (1)

Q35 Most young people would be reluctant to date someone who has admitted they have financial issues.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q36 Most people believe that seeing a financial counselor is a sign of personal failure.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q37 † I avoid getting close to people who don't have financial issues to avoid rejection.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q38 † I don't socialize as much as I used to because my financial troubles might make me look "out of place."

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q39 † I don't talk about myself much because I don't want to burden others with my financial issues.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

Q40 † Being around people who don't struggle to manage their finances makes me feel out of place or inadequate.

- ☐ Strongly Disagree (1)
- ☐ Disagree (2)
- ☐ Neutral (3)
- ☐ Agree (4)
- ☐ Strongly Agree (5)

† Only administered to students who responded 'Strongly Agree' or 'Agree' to Q21

Appendix B – Informed Consent Form

Thank you for taking the time to participate in this survey. Participation is voluntary, and you may withdraw at any time without penalty or loss of benefits.

You are being asked to participate in this research study to understand the relationship between perceived stigma in undergraduate students on perceived financial help-seeking behavior. As part of this survey, you will be asked a series of questions regarding your personal financial management behaviors. Your confidentiality throughout this survey will be maintained. We will work to make sure that no one sees your survey responses without approval. But, because we are using the Internet, there is a chance that someone could access your online responses without permission. In some cases, this information could be used to identify you. You may skip any questions you do not feel comfortable answering.

At the end of the survey you will have the opportunity to select if you wish to be entered into a lottery for one of 10 \$100 Amazon gift cards. The survey should take approximately 10 minutes to complete. If at any time you do not wish to continue with the study, you may exit out of the survey window.

For any questions or concerns about this survey or the measures used to protect your confidentiality, you may contact Dr. Catherine Montalto at montalto.2@osu.edu. For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

By clicking to the next page, you are confirming you are of +18 years of age and are giving your consent to participate in this study.

Appendix C – Reliability Analysis

Case Summary

| | ATSPH | FS | SSOSH | PD | ISMI |
|----------------|--------------|-----------|--------------|-----------|-------------|
| Valid Cases | 216 | 216 | 215 | 216 | 19 |
| Excluded Cases | 0 | 0 | 1 | 0 | 197 |
| Total | 216 | 216 | 216 | 216 | 216 |

Attitudes Towards Seeking Professional Help Scale

Inter-Item Correlation Matrix

| | Q13 | Q14 | Q15 | Q16 | Q17 |
|------------|------------|------------|------------|------------|------------|
| Q13 | 1.000 | | | | |
| Q14 | .055 | 1.000 | | | |
| Q15 | .271 | .426 | 1.000 | | |
| Q16 | .275 | .162 | .220 | 1.000 | |
| Q17 | .258 | .139 | .365 | .205 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|-----|-----------------------------------|---------------------------------------|---|-------------------------------------|---|
| Q13 | 13.44 | 6.210 | .316 | .149 | .577 |
| Q14 | 12.58 | 6.459 | .287 | .193 | .591 |
| Q15 | 12.30 | 5.726 | .520 | .311 | .463 |
| Q16 | 12.94 | 6.801 | .327 | .116 | .567 |
| Q17 | 12.38 | 6.403 | .370 | .169 | .545 |

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|-------------------------|---|-------------------|
| .605 | .609 | 5 |

Financial Stress Scale

Inter-Item Correlation Matrix

| | Q18 | Q19 | Q20 | Q21 |
|------------|------------|------------|------------|------------|
| Q18 | 1.000 | | | |
| Q19 | .625 | 1.000 | | |
| Q20 | .502 | .573 | 1.000 | |
| Q21 | .512 | .740 | .550 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|-----|-----------------------------------|---------------------------------------|---|-------------------------------------|---|
| Q18 | 7.06 | 8.885 | .630 | .422 | .809 |
| Q19 | 7.84 | 8.611 | .769 | .644 | .751 |
| Q20 | 7.45 | 7.821 | .624 | .391 | .828 |
| Q21 | 8.07 | 9.600 | .706 | .572 | .787 |

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|-------------------------|---|-------------------|
| .836 | .849 | 4 |

Self-Stigma of Seeking Help Scale

Inter-Item Correlation Matrix

| | Q24 | Q25 | Q26 | Q27 | Q28 | Q29 | Q30 | Q31 | Q32 | Q33 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Q24 | 1.000 | | | | | | | | | |
| Q25 | .452 | 1.000 | | | | | | | | |
| Q26 | .307 | .615 | 1.000 | | | | | | | |
| Q27 | .363 | .594 | .597 | 1.000 | | | | | | |
| Q28 | .158 | .269 | .344 | .329 | 1.000 | | | | | |
| Q29 | .224 | .483 | .522 | .461 | .183 | 1.000 | | | | |
| Q30 | .330 | .593 | .563 | .589 | .318 | .497 | 1.000 | | | |
| Q31 | .200 | .566 | .554 | .542 | .234 | .504 | .619 | 1.000 | | |
| Q32 | .347 | .474 | .480 | .581 | .283 | .492 | .619 | .596 | 1.000 | |
| Q33 | .286 | .582 | .530 | .544 | .185 | .623 | .570 | .608 | .523 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|-----|-----------------------------------|---------------------------------------|---|-------------------------------------|---|
| Q24 | 21.63 | 32.758 | .403 | .259 | .896 |
| Q25 | 22.63 | 30.944 | .733 | .576 | .868 |
| Q26 | 22.50 | 30.475 | .705 | .531 | .870 |
| Q27 | 22.67 | 31.400 | .722 | .539 | .869 |
| Q28 | 21.86 | 35.270 | .343 | .164 | .893 |
| Q29 | 22.56 | 31.696 | .615 | .463 | .877 |
| Q30 | 22.71 | 31.376 | .734 | .568 | .869 |
| Q31 | 22.80 | 32.868 | .686 | .560 | .873 |
| Q32 | 22.78 | 32.228 | .683 | .527 | .873 |
| Q33 | 22.56 | 31.332 | .695 | .561 | .871 |

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|-------------------------|---|-------------------|
| .887 | .892 | 10 |

Perceived Discrimination Scale

Inter-Item Correlation Table

| | Q34 | Q35 | Q36 |
|------------|------------|------------|------------|
| Q34 | 1.000 | | |
| Q35 | .321 | 1.000 | |
| Q36 | .284 | .187 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|-----|-----------------------------------|---------------------------------------|---|-------------------------------------|---|
| Q34 | 5.64 | 2.277 | .393 | .155 | .314 |
| Q35 | 4.52 | 2.046 | .314 | .113 | .441 |
| Q36 | 5.34 | 2.392 | .284 | .091 | .480 |

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|-------------------------|---|-------------------|
| .512 | .518 | 3 |

Internalized Stigma of Mental Illness: Social Withdrawal Scale

Inter-Item Correlation Table

| | Q37 | Q38 | Q39 | Q40 |
|------------|------------|------------|------------|------------|
| Q37 | 1.000 | | | |
| Q38 | .704 | 1.000 | | |
| Q39 | .714 | .687 | 1.000 | |
| Q40 | .716 | .727 | .648 | 1.000 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|-----|-----------------------------------|---------------------------------------|---|-------------------------------------|---|
| Q37 | 8.89 | 11.988 | .800 | .641 | .868 |
| Q38 | 8.37 | 10.023 | .792 | .631 | .856 |
| Q39 | 8.16 | 9.918 | .754 | .585 | .873 |
| Q40 | 8.05 | 10.053 | .775 | .618 | .863 |

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|-------------------------|---|-------------------|
| .895 | .903 | 4 |

Appendix D – Split Demographics Table

Table 3: Demographic Characteristics of the Sample with Neutral Category

| Variable | Total | Would Not Seek Help n (%) | Neutral n (%) | Would Seek Help n (%) |
|--------------------------|-------|---------------------------------|------------------|-----------------------------|
| Total | 217 | 17 (7.8) | 44 (20.3) | 156 (71.9) |
| Gender | | | | |
| Male | 96 | 8 (8.3) | 27 (28.1) | 61 (63.5) |
| Female | 120 | 9 (7.5) | 17 (14.2) | 94 (78.3) |
| STEP Affiliation | | | | |
| Yes, completed STEP | 46 | 3 (6.5) | 8 (17.4) | 35 (76.1) |
| Yes, currently in STEP | 18 | 2 (11.1) | 4 (22.2) | 12 (66.7) |
| No | 153 | 12 (7.8) | 32 (20.9) | 109 (71.2) |
| Studying/week | | | | |
| 0-4 | 29 | 4 (13.8) | 8 (27.6) | 17 (58.6) |
| 5-9 | 49 | 4 (8.2) | 11 (22.4) | 34 (69.4) |
| 10-14 | 56 | 2 (3.6) | 8 (14.3) | 46 (82.1) |
| 15-19 | 39 | 3 (7.7) | 9 (23.1) | 27 (69.2) |
| 20+ | 44 | 4 (9.1) | 8 (18.2) | 32 (72.7) |
| Working/week | | | | |
| No job | 69 | 7 (10.1) | 13 (18.8) | 49 (71.0) |
| Part Time (1-20) | 118 | 7 (5.9) | 25 (21.2) | 86 (72.9) |
| Full Time (21+) | 29 | 3 (10.3) | 6 (20.7) | 20 (69.0) |
| Personal Finance | | | | |
| Education in High School | | | | |
| Yes, mandatory | 39 | 4 (10.3) | 12 (30.8) | 23 (59.0) |
| Yes, voluntarily | 25 | 3 (12.0) | 1 (4.0) | 21 (84.0) |
| No | 153 | 10 (6.5) | 31 (20.3) | 112 (73.2) |
| Education in University | | | | |
| Yes, mandatory | 36 | 2 (5.6) | 7 (19.4) | 27 (75.0) |
| Yes, voluntarily | 17 | 0 (0) | 3 (17.6) | 14 (82.4) |
| No | 164 | 15 (9.1) | 34 (20.7) | 115 (70.1) |
| Track Monthly Spending | | | | |
| Yes | 108 | 2 (1.9) | 16 (14.8) | 90 (83.3) |
| No | 109 | 15 (13.8) | 28 (25.7) | 66 (60.6) |
| Carry Renter's Ins. | | | | |
| Yes | 76 | 6 (7.9) | 14 (18.4) | 56 (73.7) |
| No | 141 | 11 (7.8) | 30 (21.3) | 100 (70.9) |
| Pay \$400 Expense | | | | |
| Yes | 183 | 13 (7.1) | 34 (18.6) | 136 (74.3) |
| No | 34 | 4 (11.8) | 10 (29.4) | 20 (58.8) |
| Seen Financial Counselor | | | | |
| Yes | 22 | 1 (4.5) | 2 (9.1) | 19 (86.4) |
| No | 195 | 16 (8.2) | 42 (21.5) | 137 (70.3) |